

# Small Intestinal Lipoma Causing Intussusception: A Rare Case Report from Vietnam

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**Abstract:** *Small intestinal lipomas are benign adipose tumors that arise within the intestinal wall or mesentery of the small bowel. Following the data of reports, the incidence of this formation ranges from 0.035% to 4% [1]. The small bowel is the second most common site of lipomas in the gastrointestinal, and the first belongs to the large intestine. In general, the patient has no symptoms. However, small bowel lipomas can cause numerous complications in large sizes. We present a rare case of a 68-year-old Vietnamese female patient who underwent an acute small bowel intussusception emergency due to a small intestinal lipoma.*

**Keywords:** lipoma, intussusception, end - to - end anastomosis

## 1. Introduction

Small intestinal lipomas are benign adipose tumors that arise within the intestinal wall or mesentery of the small bowel, with the incidence ranging from 0.035% to 4% [1]. Lipoma can present throughout the gastrointestinal tract, with small bowel accounting for 25%. The small bowel is the second most common site of lipomas in the gastrointestinal, and the first belongs to the large intestine. Small intestinal lipoma is one of the rarest disorders of gastrointestinal disease, especially Viet Nam. The cause of the lipoma in the small intestine is not clear. However, many studies showed that lipoma in the small bowel is related to metabolic abnormalities, alcohol abuse, and polyneuropathy. Gastrointestinal lipoma is usually a single and slow-growing benign tumor. Most patients have no symptoms [2]. In a few cases, the patient was admitted to the emergency room because of complications of small bowel lipoma. Asymptomatic lipoma can require observation.

Meanwhile, giant lipoma - causing symptoms require treatments such as endoscopic or surgical resection. After surgery, we will take the mass to make histopathology to know precisely the lipoma. We will present a rare case of a 68-year-old Vietnamese female patient who underwent an

emergency of acute small bowel intussusception due to small intestinal lipomas.

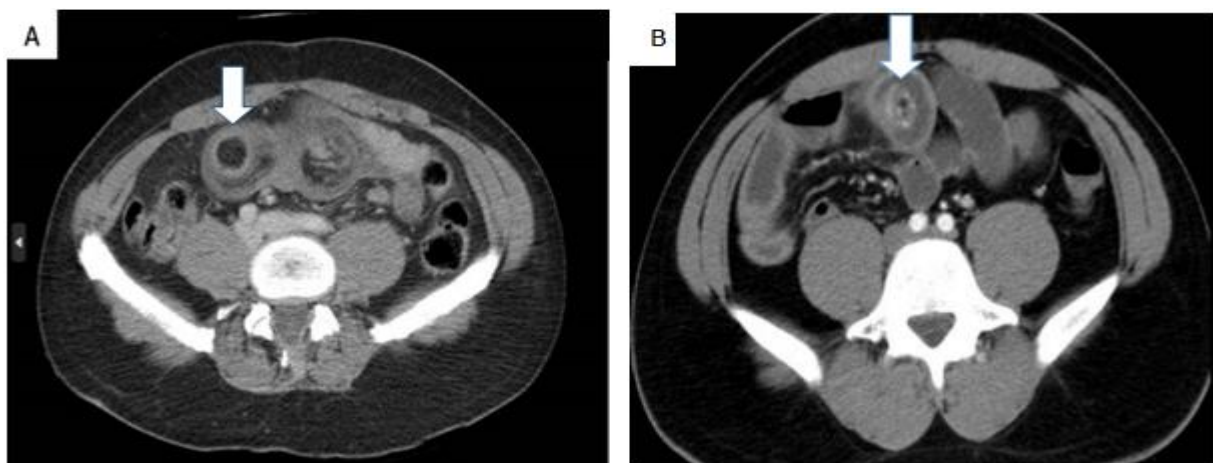
## 2. Case Report

A female patient, 68 years old, was admitted to the emergency room because of left upper quadrant abdominal pain lasting a few days. Pain increases with bowel movement. The symptoms associated included obstipation and no fart lasting three days. The vital signs at admission were:

- Heart rate: 80 times/minute.
- Temperature: 37 °C.
- Her blood pressure was 125/71 mmHg.
- Her respiratory rate was 18 times per minute.

The abdominal examination noted mild pain in the left upper quadrant and palpated the left hypochondrium to feel a mobile mass, and the size is 6cm, density is soft. An anorectal investigation revealed no abnormalities.

The computed tomography results showed a 7cm intussusception of a tumor in the left upper quadrant abdomen, the structure of the tumor



**Figure 1:** A - The computed tomography showed intraluminal fat density within small bowel  
B - The computed tomography results showed a 7cm intussusception of tumor in the left upper quadrant abdomen

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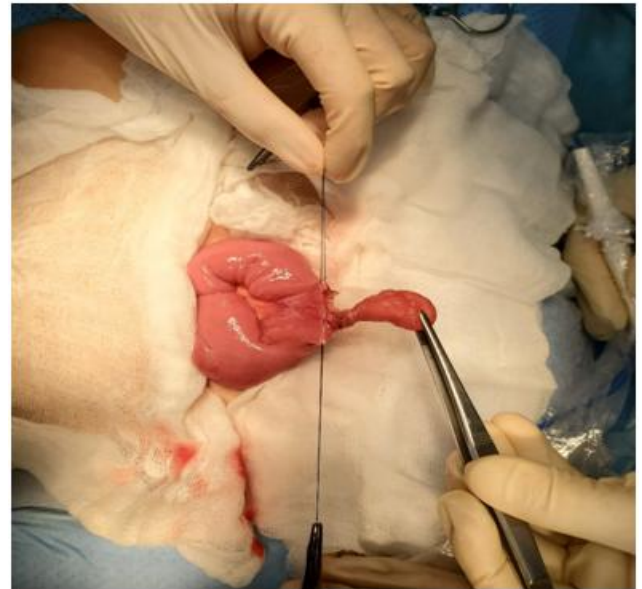
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The patient was diagnosed with semi - obstruction because of intussusception of the small bowel and was scheduled for elective laparoscopy. The patient was lying supine, with the head tilted to the right, under endotracheal anesthesia. The surgical team carried it out into the abdomen with three trocars (two 5mm trocars and one 10mm trocar). The abdominal cavity was clean, and the other organs had no abnormalities. The loops of the small intestine are slightly dilated. The intussusception mass of the small bowel was found at the jejunum, 150cm from the ligament of Treitz. We removed the intussusception, resected the small intestine containing the intussusception and fatty tumor, and end - to - end anastomosis.

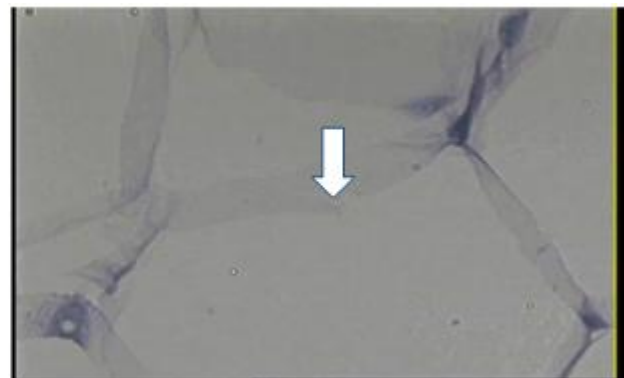
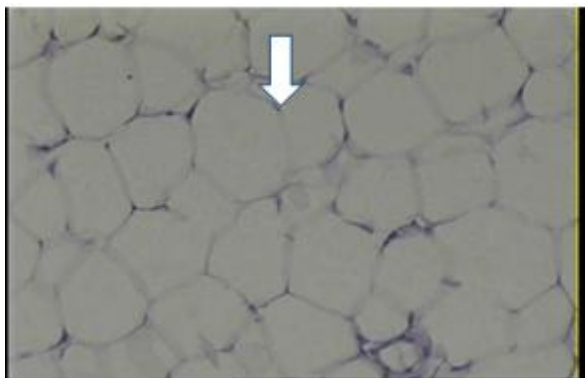


**Figure 2:** Intussusception occurring in small bowel



**Figure 3:** resection of the small intestine containing the intussusception and fatty tumor

Postoperatively, the patient recovered well and had a good bowel movement on the third postoperative day. After surgery, there was no abnormality recorded. The patient was discharged on postoperative day 7. The postoperative pathology results displayed lipoma.



**Figure 4:** Microscopic slide revealing adipose tissue in lipoma mass

### 3. Discussion

Gastrointestinal lipomas originate from the mesenchyma, and uncommon benign tumors exist. Lipoma can appear in any part of the gastrointestinal and is most commonly located in the colon (65 to 75%) and small bowel (20 to 25%) [3]. Usually, lipoma appears in the gut with a single formation. However, nearly 10% of lipomas occur in multiple organs. Following the pathology, there are three types of intestinal lipoma: the intermuscular type, the subserosal type, and the submucosal type. The submucosal type is the most popular of the three types [4]. It occurs in

the submucosal layer and grows into the mass that can be detected. Small intestinal lipoma may cause abdominal pain, hematochezia, or incomplete obstruction if the lipoma size is more significant than 2cm [3].

Intussusception usually occurs in childhood, but adult intussusception is a sporadic condition. If adult intussusception happens, there are many specific causes. Many reports show that intestinal lipoma larger than 2 cm can cause intussusception [3]. The presence of the lipoma mass in the small intestine can prevent peristalsis, more and more cause intussusception. Commonly, the terminal and a

segment of small bowel intussusceptions into the right colon [5]. Adult intussusception has nonspecific symptoms, therefore challenging physicians to get the exact diagnosis.

Many medical reports suggested imaging and endoscopy that support physicians in diagnosing intestinal lipoma [6]. A computer tomography scan is the most valuable diagnostic method for intestinal lipoma [6]. It describes the typical characteristics of intestinal lipoma and detects many complications of giant lipoma like intussusception and bowel obstruction if present. Capsule endoscopy and balloon endoscopy are new tools for finding the lipomas of the small bowel. During the endoscopy, a biopsy is not necessary because of causing the risks like colitis, bleeding, and perforation [7]

Small - sized or asymptomatic lipoma is not an indication of treatment. However, if the giant lipoma causes complications, the doctor considers intervening by surgery, including laparotomy and laparoscopy of resection [8]. More recently, endoscopic resection has been regarded as an alternative therapy for lipoma. Snare polypectomy is sometimes used to cut lipoma mass instead of endoscopy resection. Regardless, the removal of lipomas by polypectomy is also associated with a greater risk of perforation. Therefore, surgical resection is a priority to respect the lipoma greater than 2 cm. The prognosis is excellent, with no reports of recurrence [8].

#### 4. Conclusion

We hope this report can provide the information and knowledge associated with symptomatic small bowel lipomas for clinicians. It will inform the doctor to guide management correctly to help the patient to reach better outcomes.

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